

What is claimed is:

1. A cooling system for a display projector, said display projector having a plurality of panels substantially enclosing a heat generating component, said cooling system comprising:
means for conducting heat from the heat generating component to at least one panel of the
5 housing; and
means for dissipating the conducted heat, wherein the means for dissipating comprises at
least one panel of the display projector.

10 2. The cooling system according to claim 1, wherein the means for dissipating the
conducted heat comprises a panel containing a working fluid having a relatively low boiling point
temperature.

15 3. The cooling system according to claim 1, wherein the means for dissipating
comprises a chamber housing a working fluid in the at least one panel, and wherein the working
fluid is operable to vaporize and condensate to thereby dissipate the conducted heat.

20 4. The cooling system according to claim 1, further comprising:
means for supporting the heat generating component on at least one panel of the display
projector, wherein the means for supporting the heat generating component comprises the means
for conducting heat.

5. The cooling system according to claim 4, wherein the means for supporting the
heat generating component comprises means for supporting the heat generating component on at
least two panels of the display projector.

25 6. The cooling system according to claim 4, wherein the means for supporting
comprises a panel containing a working fluid.

30 7. The cooling system according to claim 1, wherein the means for dissipating the
conducted heat comprises at least two panels of the display projector.

8. The cooling system according to claim 1, further comprising:
fin means for increasing heat dissipated by the means for dissipating heat.

9. The cooling system according to claim 1, wherein the means for conducting heat
5 comprises one or more heat conducting members, said cooling system further comprising:
means for collecting heat conducted by the one or more heat conducting members, said
means for collecting heat being configured to conduct heat to the means for dissipating heat.

10. The cooling system according to claim 9, wherein the heat generating device
10 comprises a projecting device having a lamp reflector, and wherein the one or more heat
conducting members are thermally connected to the lamp reflector.

11. The cooling system according to claim 9, wherein the heat generating device
comprises a projecting device having a lamp reflector, said cooling system further comprising:
15 a cover device for thermal connection to the lamp reflector, said one or more heat
conducting members being thermally connected to the cover device.

12. The cooling system according to claim 1, wherein the heat generating device
comprises a projecting device having a lamp reflector, said lamp reflector comprising the means
20 for conducting heat.

13. The cooling system according to claim 12, wherein the lamp reflector includes a
channel containing a working fluid having a relatively low boiling point temperature.

25 14. The cooling system according to claim 1, wherein the means for conducting heat
comprises a thermosiphon containing a working fluid.

15. The cooling system according to claim 14, wherein the thermosiphon comprises
an evaporator section thermally connected to the heat generating component and a condenser
30 section thermally connected to the means for dissipating the conducted heat, and wherein the

working fluid is operable to receive heat from the heat generating component in the evaporator section and convey the heat to the condenser section.

16. The cooling system according to claim 14, wherein the heat generating component
5 comprises a projecting device having a lamp reflector, said lamp reflector being integrally formed
with the thermosiphon and functioning as an evaporator section of the thermosiphon.

17. The cooling system according to claim 14, wherein the thermosiphon includes a
wicking material for facilitating fluid travel through the thermosiphon.

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18. A display projector having a housing composed of a plurality of panels, said
display projector comprising:

one or more heat generating components;

a heat dissipating device forming at least one of the plurality of panels;

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at least one heat conducting member for conducting heat from the one or more heat
generating components to the heat dissipating device.

19. The display projector according to claim 18, wherein the heat dissipating device
comprises a panel containing a working fluid having a relatively low boiling point temperature.

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20. The display projector according to claim 18, wherein the heat dissipating device
comprises a chamber housing a working fluid in the at least one panel, and wherein the working
fluid is operable to vaporize and condensate to thereby dissipate the conducted heat.

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21. The display projector according to claim 18, further comprising:

at least one mounting plate for supporting the one or more heat generating components on
the at least one panel, said at least one mounting plate being configured to conduct heat from the
one or more heat generating components to the at least one panel.

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22. The display projector according to claim 21, wherein the at least one mounting plate comprises a panel containing a working fluid having a low boiling point temperature.

23. The display projector according to claim 21, further comprising:
5 a thermally conductive interface material positioned between the at least one mounting plate in the at least one panel for enhancing thermal conduction between the at least one mounting plate and the at least one panel.

24. The display projector according to claim 18, wherein the at least one heat 10 conducting member is thermally attached to the one or more heat generating components, wherein the at least one heat conducting member is also thermally attached to a collector, and wherein the collector is thermally attached to the heat dissipating device.

25. The display projector according to claim 24, wherein the at least one heat 15 generating device comprises a projecting device having a lamp reflector, and wherein the at least one heat conducting member is thermally connected to the lamp reflector.

26. The display projector according to claim 24, wherein the at least one heat generating device comprises a projecting device having a lamp reflector, said display projector 20 further comprising:

a cover device for thermal connection to the lamp reflector, said one or more heat conducting members being thermally connected to the cover device.

27. The display projector according to claim 24, wherein the collector is removably 25 attached to the heat dissipating device.

28. The display projector according to claim 18, wherein the at least one heat generating device comprises a projecting device having a lamp reflector, said lamp reflector comprising the at least one heat conducting member.

29. The display projector according to claim 28, wherein the lamp reflector includes a channel containing a working fluid having a relatively low boiling point temperature.

30. The display projector according to claim 18, wherein at least one heat conducting member comprises a thermosiphon.

31. The display projector according to claim 30, wherein the thermosiphon comprises an evaporator section thermally attached to at least one of the one or more heat generating components, said thermosiphon further comprising a condenser section thermally attached to the heat dissipating device.

32. The display projector according to claim 31, wherein the condenser section is further removably attached to the heat dissipating device.

33. The display projector according to claim 30, wherein at least one of the one or more heat generating components comprises a projecting device having a lamp reflector, said lamp reflector being integrally formed with the thermosiphon and functioning as an evaporator section of the thermosiphon.

34. A method for cooling one or more heat generating components in a display projector, said display projector having at least one panel, said method comprising:

conducting heat from the one or more heat generating components to a heat dissipating device located in the at least one panel of the display projector; and

dissipating the conducted heat with the heat dissipating device to thereby cool the one or more heat generating components.

35. The method according to claim 34, wherein the one or more heat generating components comprises a projecting device having a lamp reflector, and wherein said step of conducting heat further comprises conducting heat from the lamp reflector.

36. The method according to claim 35, wherein said step of conducting heat from the lamp reflector comprises conducting heat from the lamp reflector with a heat pipe having a working fluid.

5 37. The method according to claim 35, wherein said step of conducting heat from the lamp reflector comprises conducting heat from the lamp reflector to a cover device, conducting heat from the cover device to a heat conducting member, conducting heat from the heat conducting member to a collector, and conducting heat from the collector to the heat dissipating device.

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38. The method according to claim 35, wherein the lamp reflector comprises a channel having a working fluid, and wherein the step of conducting heat comprises vaporizing the working fluid in the lamp reflector and directing the vaporized working fluid to the heat dissipating device.

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39. The method according to claim 34, wherein the one or more heat generating components are mounted on the at least one panel with a mounting plate, said step of conducting heat further comprising conducting heat through the mounting plate.

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